

### **REMARKS**

These remarks are in response to the Office Action dated February 26, 2010. Applicant requests a three-month extension of time and authorization is given to charge Deposit Account No. 50-0951 for the appropriate fees.

At the time of the Office Action, claims 1-6 and 8-12 were pending. In the Office Action, claims 1-6 and 8-12 were rejected under 35 U.S.C. §103(a). The rejection is discussed in more detail below.

#### **I. Rejections based upon art**

Claims 1-6 and 8-12 were rejected under 35 U.S.C. §103(a) as being unpatentable over PCT Publication No. WO 03/095060 to Gandolfi et al. ("*Gandolfi*") in view of European Patent Publication No. 60238492 to Nagano ("*Nagano*"), and further in view of Applicant's admission. Applicant respectfully traverses the rejection and requests reconsideration of the pending claims.

The most recent Office Action acknowledges that the objection based on the Applicant's Admission is not pertinent and reiterates the rejection based on *Gandolfi* in view of *Nagano*.

The Office Action asserts that there is no difference between the claimed bonding of a zirconium coating onto a titanium tube metallurgically or through welding terms and the electrolytical deposition of zirconium on a titanium surface taught in *Nagano*. This assertion is technically incorrect. Welding or metallurgically bonding (such as by hot-drawing) is an extremely strong mechanical bonding between two surfaces of different materials, which make them practically impossible to detach even when subjected to the most extreme operative conditions as clearly explained in Applicant's specification (see, for instance, page 12).

This bonding has nothing to do with and cannot be compared to electrolytical deposition of one material onto another. This technique, also called electroplating, uses electrical current to reduce cations of a desired material from a solution and coat a conductive object with a thin layer of the material, such as a metal.

Moreover, it should be noted that there is no evidence in the prior art that the electrolytical deposition technique of *Nagano* can successfully be used to form a coating layer on the internal surface of the tubes of a tube bundle heat exchanger. Therefore, *Nagano* does not teach covering

the inner walls of a tube bundle with a zirconium coating.

Accordingly, it is not appropriate to consider the claimed bonding as a mere design choice, obvious to a person of ordinary skill in the art at the time of the claimed invention. Indeed there is no disclosure or suggestion in the art to coat the internal walls of a titanium tube bundle with a zirconium layer, or that such a coating is obtained by bonding the zirconium layer to the titanium tubes metallurgically or through welding.

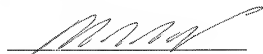
For the foregoing reasons, independent claim 1 is patentable over the cited prior art. The dependent claims are also believed allowable because of their dependence upon an allowable base claim, and because of the further features recited.

## II. Conclusion

Applicant has made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicant respectfully requests reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

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